

ESD Climate and Carbon Sciences Program/ Climate Sciences Department Publications List, 2007–2011

The following lists include those documents (journal articles, books, book chapters, conference papers, reports) associated with the Earth Sciences Division that changed their publication status from “submitted/in review” to “accepted” or “in press,” or that were published (and have a completed citation), during the period from January 1, 2007, through Dec. 31, 2011.

2011

1. Ballantyne, A.P., P.A. Baker, J.Q. Chambers, R. Villalba, and J. Argollo (2011), Regional differences in South American monsoon precipitation inferred from the growth and isotopic composition of tropical trees. *Earth Interactions*, 15 (5); DOI: 10.1175/2010EI277.1.
2. Buennning, N., D.C. Noone, J.T. Randerson, W.J. Riley, C.J. Still, and J. White (2011), Influences of the hydrological cycle on observed interannual variations in atmospheric CO¹⁸O. *Journal of Geophysical Research—Biogeosciences*, 116, G04001; DOI: 10.1029/2010JG001576.
3. Chang, C-Y., J.C.H. Chiang, M.F. Wehner, A. Friedman, and R. Ruedy (2011), Sulfate aerosol control of tropical Atlantic climate over the 20th century. *Journal of Climate*, 24, 2540–2555; DOI:10.1175/2010JCLI4065.1.
4. Conley, A.J., and W.D. Collins (2011), Extension of the weak-line approximation and application to correlated-k methods. *Journal of Quantitative Spectroscopy and Radiative Transfer*, 112 (13), 2041–2048. LBNL-5146E.
5. Cusack, D.F., W.L. Silver, M.S. Torn, S.D. Burton, and M.K. Firestone (2011), Changes in microbial community characteristics and processing of soil organic matter after chronic nitrogen additions on in two tropical forests. *Ecology*, 92 (3), 621–632; DOI:10.1890/10-0459.1.
6. Cusack, D.F., W.L. Silver, M.S. Torn, and W.H. McDowell (2011), Effects of nitrogen additions on above- and belowground carbon dynamics in two tropical forests. *Biogeochemistry*, 104, 203-225; DOI: 10.1007/s10533-010-9496-4. LBNL-5143E.
7. de Boer, G., W.D. Collins, S. Menon, and C. Long (2011) Using surface remote sensors to derive mixed-phase cloud radiative forcing: An example from M-PACE. *Atmos. Chem. Phys. Discuss.*, 11, 1–32; DOI: 10.5194/acpd-11-1-2011.
8. Di Vitorrio, A.V., R.S. Anderson, J.P. White, N.L. Miller, and S.W. Running (2011), Development and optimization of an AGROBGC ecosystem model for perennial C4 grasses. *Ecological Modelling*, 221, 2038–2053.
9. Feldman, D.R., C.A. Algieri, W.D. Collins, Y.L. Roberts, and P.A. Pilewskie (2011), Simulation studies for the detection of changes in broadband albedo and shortwave nadir reflectance spectra under a climate change scenario. *Journal of Geophysical Research*, 116, D24103; DOI: 10.1029/2011JD016407. LBNL-5329E.
10. Feldman, D.R., C.A. Algieri, J.R. Ong, and W.D. Collins (2011), CLARREO shortwave observing system simulation experiments of the twenty-first century: Simulator

- design and implementation. *Journal of Geophysical Research*, 116, D10107; DOI: 10.1029/2010JD015350. LBNL-4791E.
- 11. Jin, J. and N.L. Miller (2011), Improvement of snowpack simulations in a regional climate model. *Hydrological Processes*, 25 (14), 2202–2210; DOI:10.1002/hyp.7975. LBNL-5137E.
 - 12. Kato, S., F.G. Rose, S. Sun-Mack, W.F. Miller, Y. Chen, D.A. Rutan, G.L. Stephens, N.G. Loeb, P. Minnis, B.A. Wielicki, D.M. Winker, T.P. Charlock, P.W. Stackhouse, K.-M. Xu, and W. Collins (2011), Improvements of top-of-atmosphere and surface irradiance computations with CALIPSO, CloudSat, and MODIS-derived cloud and aerosol properties. *Journal of Geophysical Research* 116, D19209; DOI: 10.1029/2011JD016050.
 - 13. Kleber, M., P.S. Nico, A. Plante, T. Filley, M. Kramer, C. Swanston, and P. Sollins (2011), Old and stable soil organic matter is not necessarily chemically recalcitrant: Implications for modeling concepts and temperature sensitivity. *Global Change Biology*, 17 (2), 1097–1107; DOI: 10.1111/j.1365-2486.2010.02278.x. LBNL-3556E.
 - 14. Koven, C., B. Ringeval, P. Friedlingstein, P. Ciais, P. Cadule, D. Khvorostyanov, G. Krinner, and C. Tarnocai (2011). Permafrost carbon-climate feedbacks accelerate global warming. *Publications of the National Academy of Science (PNAS)*, 108 (36), 14769–14774; DOI: 10.1073/pnas.1103910108. LBNL-5076E.
 - 15. Li, F., W.D. Collins, M.F. Wehner, D.L. Williamson, and J.G. Olson (2011), Response of precipitation extremes to global warming in an aqua-planet climate model: Towards robust projection from regional to global scales. *Tellus A*, 63 (5), 876–883; DOI: 10.1111/j.1600-0870.2011.00543.x. LBNL-4758E.
 - 16. Li, F., W.D. Collins, M.F. Wehner, D.L. Williamson, J.G. Olson, and C. Algieri (2011), Impact of horizontal resolution on simulation of precipitation extremes in an aqua-planet version of the Community Atmosphere Model (CAM). *Tellus A*, 63 (5), 884–892; DOI: 10.1111/j.1600-0870.2011.00544.x. LBNL-4790E.
 - 17. Mackelprang, R., M.P. Waldrop, K.M. DeAngelis, M.M. David, K.L. Chavarria, S.J. Blazewicz, E.M. Rubin, and J.K. Jansson (2011), Metagenomic analysis of a permafrost microbial community reveals a rapid response to thaw. *Nature*, 480, 368–371; DOI: 10.1038/nature10576. LBNL-5155E.
 - 18. Macleod, M., H. von Waldow, P. Tay, J.M. Armitage, H. Wohrnshimmel, W.J. Riley, T.E. McKone, and K. Hungerbuhler (2011), BETR Global—A geographically explicit global-scale multimedia contaminant fate model. *Environmental Pollution*, 159, 1442–1445; DOI: 10.1016/j.envpol.2011.01.038, 1442-1445. LBNL-4955E.
 - 19. Mambelli, S., J.A. Bird, G. Gleixner, T.E. Dawson, and M.S. Torn (2011), Relative contribution of needle and fine root pine litter to the molecular composition of soil organic matter after in situ degradation. *Organic Geochemistry*, 42 (9), 1099–1108; DOI: 10.1016/j.orggeochem.2011.06.008.
 - 20. Massad, T.J., J.Q. Chambers, S.G. Rolim, R.M. Jesus, and L.A. Dyer (2011), Restoration of pasture to forest in Brazil's Mata Atlântica: The roles of herbivory, seedling defenses, and plot design in reforestation. *Restoration Ecology*, 19, 257–267.
 - 21. McKone, T.E., W.W. Nazaroff, P. Berck, M. Auffhammer, T. Lipman, M.S. Torn, E. Masanet, A. Lobscheid, N. Santero, U. Mishra, A. Barrett, M. Bomberg, K. Fingerman, C. Scown, B. Strogen, and A. Horvath (2011), Grand challenges for life-

- cycle assessment of biofuels. *Environmental Science & Technology*, 45 (5), 1751–1756; DOI: 10.1021/es103579c.
- 22. Negrón-Juárez, R.I., J.Q. Chambers, D.M. Marra, G.H.P.M. Ribeiro, S.W. Rifai, N.Higuchi, and D. Roberts (2011), Detection of subpixel treefall gaps with Landsat imagery in Central Amazon forests. *Remote Sensing of Environment*, 115 (12), 3322–3328; DOI: 10.1016/j.rse.2011.07.015.
 - 23. Reinhardt, K., C. Castanha, M. Germino, and L. Kueppers (2011), Ecophysiological variation in two provenances of *Pinus Flexilis* seedlings along an elevation gradient from forest to alpine. *Tree Physiology*, 31 (6), 615–625.
 - 24. Riley, W.J., Z.M. Subin, D.M. Lawrence, S.C. Swenson, M.S. Torn, L. Meng, N. Mahowald, and P. Hess (2011), Barriers to predicting changes in global terrestrial methane fluxes: Analyses using CLM4Me, a methane biogeochemistry model integrated in CESM. *Biogeosciences*, 8, 1925–1953; DOI: 10.5194/bg-8-1925-2011.
 - 25. Ringeval, B, P. Friedlingstein, C. Koven, P. Ciais, N. de Noblet-Ducoudré, B. Decharme, and P.Cadule (2011), Climate-methane feedback from wetlands and its interaction with the climate-carbon cycle feedback. *Biogeosciences*, 8, 2137–2157.
 - 26. Romps, D.M. (2011), A direct measure of entrainment. *Bulletin of the American Meteorological Society*, 67 (6), 1908–1927.
 - 27. Romps, D.M (2011), Response of tropical precipitation to global warming, *Journal of the Atmospheric Sciences*, 68 (1), 123–138.
 - 28. Romps, D.M, and Z. Kuang (2011), A transilient matrix for moist convection. *Journal of the Atmospheric Sciences*, 68 (9). LBNL-5030E.
 - 29. Salve, R., and M. Torn (2011), Precipitation and soil impacts on partitioning of subsurface moisture in *Avena barbata*: Observations from a greenhouse experiment. *Vadose Zone Journal*, 10 (1), 437–449; DOI: 10.2136/vzj2010.0055. LBNL-4542E.
 - 30. Schmidt, M.W.I., M. S. Torn, S. Abiven, T. Dittmar, G. Guggenberger, I.A. Janssens, M. Kleber, I. Kögel-Knabner, J. Lehmann, D.A.C. Manning, P. Nannipieri, D.P. Rasse, S. Weiner, and S.E. Trumbore (2011), Persistence of soil organic matter as an ecosystem property. *Nature*, 478, 49–56; DOI: 10.1038/nature10386. LBNL-5135E.
 - 31. Schuur, E.A.G., B. Abbott, W.B. Bowden, V. Brovkin, P. Camill, J.P. Canadell, F.S. Chapin III, T.R. Christensen, J.P. Chanton, P. Ciais, P.M. Crill, B.T. Crosby, C.I. Czimczik, G. Grossé, D.J. Hayes, G. Hugelius, J.D. Jastrow, T. Kleinen, C.D. Koven, G. Krinner, P. Kuhry, D.M. Lawrence, S.M. Natali, C.L. Ping, A. Rinke, W.J. Riley, V.E. Romanovsky, A.B.K. Sannel, C. Schädel, K. Schaefer, Z.M. Subin, C. Tarnocai, M. Turetsky, K. M. Walter-Anthony, C.J. Wilson, and S.A. Zimov (2011), High risk of permafrost thaw. *Nature*, 480, 32–33; DOI: 10.1038/480032a. LBNL-5261E.
 - 32. Subin, Z.M., W.J. Riley, L.M. Kueppers, J. Jin, D.S. Christianson, and M.S. Torn (2011), Ecosystem feedbacks to climate change in California: Development, testing, and analysis using a coupled regional atmosphere and land-surface model (WRF3-CLM3.5). *Earth Interactions*, 15, DOI:10.1175/2010EI331.1. LBNL-4970E.
 - 33. Swarbreck, S., E. Lindquist, D. Ackerly, and G. Andersen (2011), Analysis of leaf and root transcriptomes of soil grown *Avena Barbata* plants. *Plant and Cell Physiology*, 52 (2), 317–332.
 - 34. Swarbreck, S.M., E.A. Suderth, S.B. St.Clair, R. Salve, C. Castanha, M.S. Torn, D.D. Ackerly, and G.L. Andersen (2011), Linking leaf transcripts levels to whole plant analyses provides mechanistic insights to the impact of warming and altered water

- availability in an annual grass. *Global Change Biology*, 17 (4), 1577–1594; DOI: 10.1111/j.1365-2486.2010.02359.x.
35. Torn, M.S., S. Biraud, C.J. Still, W.J. Riley, and J.A. Berry (2011), Seasonal and interannual variability in ^{13}C composition of ecosystem carbon fluxes in the U.S. Southern Great Plains. *Tellus-B.*, 63 (2), 181–195; DOI: 10.1111/j.1600-0889.2010.00519.x. LBNL-4004E.
 36. Wang, T., P. Ciais, S.L. Piao, C. Ottlé, P. Breden, F. Maignan, A. Arain, A. Cescatti, D. Gianelle, C. Gough, L. Gu, P. Lafleur, T. Laurila, B. Marcolla, H. Margolis, L. Montagnani, E. Moors, N. Saigusa, T. Vesala, G. Wohlfahrt, C. Koven, A. Black, E. Dellwik, A. Don, D. Hollinger, A. Knohl, R. Monson, J. Munger, A. Suyker A. Varlagin and S. Verma (2011), Controls on winter ecosystem respiration in temperate and boreal ecosystems. *Biogeosciences*, 8 (7), 2009–2025.
 37. Wang, X., S. Piao, P. Ciais, J. Li, P. Friedlingstein, C. Koven, and A. Chen (2011), Spring temperature change and its implication in the change of vegetation growth in North America from 1982 to 2006. *PNAS*, 108 (4), 1240–1245.
 38. Wunch, D., P.O. Wennberg, G.C. Toon, B.J. Connor, B. Fisher, G.B. Osterman, C. Frankenberg, L. Mandrake, C. O'Dell, P. Ahonen, S.C. Biraud, R. Castano, N. Cressie, D. Crisp, N.M. Deutscher, A. Eldering, M.L. Fisher, D.W.T. Griffith, M. Gunson, P. Heikkinen, G. Keppel-Aleks, E. Kyro, R. Lindenmaier, R. Macatangay, J. Mendonca, J. Messerschmidt, C.E. Miller, I. Morino, J. Notholt, F.A. Oyafuso, M. Rettinger, J. Robinson, C.M. Roehl, R.J. Salawitch, V. Sherlock, K. Strong, R. Sussmann, T. Tanaka, D.R. Thompson, O. Uchino, T. Warneke, and S.C. Wofsy (2011), A method for evaluating bias in global measurements of CO_2 total columns from space. *Atmos. Chem. & Phys. Discussions*, 11, 12317–12337; DOI: 10.5194/acp-11-12317-2011.

CCS/Climate Science Conference Papers 2011

1. Collins, W.D. (2011), A future with(out) climate mitigation. Paper presented at EPA-LBNL Workshop on CO_2 Geological Sequestration and Water Resources, University of California, Berkeley, CA, June 1, 2011.
2. Collins, W.D., and D.R. Feldman (2011), The future evolution of the Earth's reflected shortwave spectrum. Paper presented at the 23rd Conference on Climate Variability and Change 91st American Meteorological Society Annual Meeting, Seattle WA.
3. Hultman, J., M.P. Waldrop and J.K. Jansson (2011), Comparative metagenomics of Alaskan permafrost soils: Implications for climate change. Gordon Research Conference on Applied and Environmental Microbiology, Mount Holyoke College, South Hadley, MA, July 10–15, 2011.
4. Jansson, J.K (2011), Metagenome sequencing insights: From soil to oil. Paper presented at First International Earth Microbiome Project Symposium. Shenzhen, China.
5. Jones, A., S. Levis, M.S. Torn, W.J. Riley, W.D. Collins (2011), Characterizing the climate effects of biofuel cultivation. Paper presented at the American Meteorological Society 23rd Conference on Climate Variability and Change, Seattle, Washington, January 27, 2011.

6. Singh, N., S. Abiven, M.S. Torn , and M.W.I. Schmidt (2011), The uncertain future of pyrogenic carbon in terrestrial system. Presented at the 4th European Geosciences Union Meeting, Vienna, Austria, April 4, 2011.
7. Torn, M.S., D.P. Billesbach, J. Bradford, C. Zou, U. Mishra, M.L. Fischer, and S. Gunter (2011), The effects of converting marginal lands to switchgrass on carbon, water, and energy fluxes. Presented at the Joint North American Carbon Program and AmeriFlux Annual Meeting, New Orleans, LA, February 2011.

2010

CCS/Climate Sciences Peer-Reviewed Journal Articles and Book Chapters for 2010

1. Abshire, J.B., H. Riris, G.R. Allan, C.J. Weaver, J. Mao, X. Sun, W.E. Hasselbrack, S.R. Kawa, and S.C. Biraud (2010), Pulsed airborne LIDAR measurements of atmospheric CO₂ column absorption. *Tellus B.*, 62, 770–783.
2. Blossey, P.N., Z. Kuang, and D.M. Romps (2010), Isotopic composition of water in the tropical tropopause layer in cloud-resolving simulations of an idealized tropical circulation. *Journal of Geophysical Research*, 115, D24309.
3. Cusack, D.F., M.S. Torn, W. H. McDowell, and W. Silver (2010), The response of heterotrophic activity and carbon cycling to nitrogen additions and warming in two tropical soils. *Global Change Biology*, 16 (9), 2555–2572; DOI: 10.1111/j.1365-2486.2009.02131.x
4. Dolan, K.A., G.C. Hurt, J.Q. Chambers, R.O. Dubayah, S. Frolking, and J.G. Masek (2010), Using ICESat's Geoscience Laser Altimeter System (GLAS) to assess large-scale forest disturbance caused by hurricane Katrina. *Remote Sensing of Environment*, 115, 86–96.
5. Dubinsky, E.A., W.L. Silver, and M.K. Firestone (2010), Tropical forest soil microbial communities couple iron and carbon biogeochemistry. LBNL-3065E. *Ecology*, 91 (9), 2604–2612.
6. Eglin, T., P. Ciais, S.L. Piao, P. Barre, V. Bellassen, P. Cadule, C. Chenu, T. Gasser, C. Koven, M. Reichstein, and P. Smith (2010), Historical and future perspectives of global soil carbon response to climate and land-use changes. *Tellus Series B-Chemical and Physical Meteorology*, 62 (5), 700–718.
7. Gaudinski, J.B., M.S. Torn, W.J. Riley, T.E. Dawson, J.D. Joslin, and H. Majdi (2010), Measuring and modeling the spectrum of fine-root turnover times in three forests using isotopes, minirhizotrons, and the Radix model. *Global Biogeochemical Cycles*, 24, ISI:000282433600002; DOI: 10.1029/2009gb003649. LBNL-5081E.
8. Gu, C. and W.J. Riley (2010), Combined effects of short-term rainfall patterns and soil texture on nitrogen cycling in soil. LBNL-3338E. *Journal of Contaminant Hydrology*, 112 (1–4), 141–154.
9. Jin, J., S. Lu, S. Li, and N.L. Miller (2011), Impact of land use change on the local climate over the Tibetan Plateau. LBNL-3591E. *Advances in Meteorology*, DOI:10.1155/2010/837480.
10. Keiluweit, M., P.S. Nico, M.G. Johnson, and M. Kleber (2010), Dynamic molecular structure of plant biomass-derived black carbon (biochar). LBNL-2968E. *Environmental Science & Technology*, 44 (4), 1247–1253; DOI: 10.1021/es9031419.
11. Kleber, M., P.S. Nico, A. Plante, T. Filley, M. Kramer, C. Swanston, and P. Sollins (2010), Old and stable soil organic matter is not necessarily chemically recalcitrant: Implications for modeling concepts and temperature sensitivity. LBNL-3556E. *Global Change Biology*, DOI: 10.1111/j.1365-2486.2010.02278.x.
12. Kulawik, S.S., D.B.A. Jones, R. Nassar, F.W. Irion, J.R. Worden, K.W. Bowman, T. Machida, H. Matsueda, Y. Sawa, S.C. Biraud, M.L. Fischer, and A.R. Jacobson (2010), Characterization of Tropospheric Emission Spectrometer (TES) CO₂ for carbon cycle science. *Atmospheric Chemistry and Physics*, 10, 5601–5623.

13. Lebassi, B., J. Gonzalez, D. Fabris, E. Maurer, N. Miller, C. Milesi, and R. Bornstein (2010), Observed 1970–2005 cooling of summer daytime temperatures in coastal California. LBNL-2225E. *Journal of Climate*, DOI: 10.1175/2008JCLI2111.1.
14. Luo, Y., J. Melillo, S. Niu, C. Beier, J.S. Clark, A.T. Classen, E. Davidson, J.S. Dukes, R.D. Evans, C.B. Field, C.I. Czimczik, M. Keller, B.A. Kimball, L.M. Kueppers, R.J. Norby, S.L. Pelini, E. Pendall, E. Rastetter, J. Six, M. Smith, M. Tjoelker, and M.S. Torn (2010); Coordinated approaches to quantify long-term ecosystem dynamics in response to global change. *Global Change Biology*, DOI: 10.1111/j.1365-2486.2010.02265.x.
15. Maggi, F.M., and W.J. Riley (2010), Mathematical treatment of isotopologue and isotopomer speciation and fractionation in biochemical kinetics. LBNL-2959E. *Journal of Geophysical Research—Biogeosciences*, 74 (6), 1823–1835.
16. McMillan, W.W., R. Pierce, L. C. Sparling, G. Osterman, K. McCann, M. L. Fischer, B. Rappengluck, R. Newsom, D. Turner, C. Kittaka, K. Evans, S. Biraud, B. Lefer, A. Andrews, and S. Oltmans (2010), An observational and modeling strategy to investigate the impact of remote sources on local air quality: A Houston, Texas, case study from TEXAQS II. *Journal of Geophysical Research*, 115, D01301.
17. Negron-Juarez, R.I., D.B. Baker, H. Zeng, T.J. Henkel, and J.Q. Chambers (2010), Assessing hurricane-induced tree mortality in U.S. Gulf Coast forest ecosystems. *Journal of Geophysical Research—Biogeosciences*, 115, G04030.
18. Negron-Juarez, R.I., J.Q. Chambers, G. Guimaraes, H. Zeng, C.F.M. Raupp, D.M. Marra G.H. Ribeiro, S.S. Saatchi, B.W. Nelson, and N. Higuchi (2010), Widespread Amazon forest tree mortality from a single cross-basin squall line event. *Geophysical Research Letters*, 37, L16701.
19. Parton, W. J., P. J. Hanson, C. Swanston, M. Torn, S. E. Trumbore, W. Riley, and R. Kelly (2010), ForCent model development and testing using the Enriched Background Isotope Study experiment. *Journal of Geophysical Research—Biogeosciences*, 115, ISI:000282768500002; DOI: 10.1029/2009jg001193. LBNL-4974E.
20. Plevin, R.J., M. O'Hare, A.D. Jones, M.S. Torn, H.K. Gibbs (2010), The greenhouse gas emissions from biofuels' indirect land use change are uncertain, but may be much greater than previously estimated. *Environmental Sci & Techn.*, 44 (21), 8015–8021; DOI: 10.1021/es101946t.
21. Schwalm, C. R., C. A. Williams, K. Schaefer, R. Anderson, M. A. Arain, I. Baker, T. A. Black, G. Chen, P. Ciais, K. J. Davis, A. R. Desai, M. Dietze, D. Dragoni, M. L. Fischer, W. J. Riley, et al. (2010), A model-data intercomparison of CO₂ exchange across North America: Results from the North American Carbon Program Site Synthesis. *Journal of Geophysical Research—Biogeosciences*, DOI: 10.1029/2009JG001229. LBNL-4989E.
22. St. Clair, S.B., E. Suderth, M.L. Fischer, M.S. Torn, S. Stuart, R. Salve, D. Egget, and D. Ackerly (2010), Variation in soil moisture and N availability modulates carbon and water exchange in a California grassland experiment. LBNL-2381E. *Global Change Biology*, 15, 3018–3030; DOI: 10.1111/j.1365-2486.2009.01862.x.
23. Swann, A.L., I. Fung, et al. (2010), Changes in Arctic vegetation amplify high-latitude warming through the greenhouse effect. *Proceedings of the National Academy of Sciences*, 107, 1295–1300.

24. Torn, M.S., S. Biraud, C.J. Still, W.J. Riley, and J.A. Berry (2010), Seasonal and inter-annual variability in ^{13}C composition of ecosystem carbon fluxes in the U.S. Southern Great Plains. LBNL-4004E. Tellus-B. (in press).
25. Walker, J.F., L. Johnson, N.B. Simpson, M. Bill, and A. Jumpponen (2010), Application of fungistatics in soil reduces N uptake by an arctic ericoid shrub (*Vaccinium vitis-idaea*). LBNL-3211E. Mycologia, 102 (4), 822-834; DOI: 10.3852/09-224.
26. Wunch, D., G.C. Toon, P.O. Wennberg, S.C. Wofsy, B.B. Stephens, M.L. Fischer, O. Uchino, J.B. Abshire, P. Bernath, S.C. Biraud, J.L. Blavier, and C. Boone (2010), A calibration of the total carbon column observing network using aircraft profile data. Atmospheric Measurement Techniques, 3, 1351–1362.
27. Yurganov, L., W. McMillan, C. Wilson, M.L. Fischer, and S.C. Biraud (2010), Carbon monoxide mixing ratios over Oklahoma between 2002 and 2009 retrieved from Atmospheric Emitted Radiance Interferometer spectra. Atmos. Meas. Tech., 3, 1319–1331.
28. Zhang, G.J., A.M. Vogelmann, M.P. Jensen, W.D. Collins, and E.P. Luke (2010), Relating satellite-observed cloud properties from MODIS to meteorological conditions for marine boundary layer clouds. Journal of Climate, 23, 1374-1391; DOI: 10.1175/2009JCLI2897.1.

CCS/Climate Science Conference Papers 2010

1. Bonfils, C. E., T. J. Phillips, W. J. Riley, W. M. Post, P. J. Cameron-Smith, and M. S. Torn (2010), On the influence of the height of expanding shrub vegetation on boreal climate. Paper presented at American Geophysical Union Fall Meeting, San Francisco, CA.
2. Buenning, N., D. Noone, W.J. Riley, C.J. Still, and J.T. Randerson (2010), The influence of hydrological changes on the ^{18}O content of atmospheric CO₂. ESRL Global Monitoring Annual Conference, Boulder, Colorado.
3. Collins W.D. (2010), Advancing climate science for a sustainable energy future. Paper presented at the Berkeley International Symposium on Energy and Climate Science (Philomathia), Berkeley Repertory Theater, Berkeley, CA., Oct. 1, 2010.
4. Collins, W.D., D.R. Feldman, C. Algieri, and J. Ong (2010), Climate change time-to-detection simulations using IPCC models for shortwave forcings and feedbacks. Paper presented at the 2010 Fall AGU Meeting San Francisco CA.
5. Feldman, D.R., W.D. Collins, C. Algieri, and J. Ong (2010), Spectral forcing and feedback signals in IPCC simulations: Simulations of next-generation observing systems. Paper presented at the 2010 Fall AGU Meeting San Francisco CA.
6. Fischer, M.L., M.S. Torn, D.P. Billesbach, G. Doyle, B. North, S.C. Biraud (2010), Carbon, water, and heat flux responses to experimental burning and drought in a tallgrass prairie. Presented at the AGU 2010 Fall Meeting, San Francisco, CA.
7. Kato, S., F.G. Rose, S. Sun-Mack, W.F. Miller, Y. Chen, D.A. Rutan, B.A. Wielicki, D.M. Winker, G. Stephens, P. Minnis, N.G. Loeb, T.P. Charlock, P.W. Stackhouse, K.-M. Xu, and W.D. Collins (2010), Computation of surface irradiances using CALIPSO CloudSat and MODIS derived cloud and aerosol properties. Paper presented at the NASA A-Train Symposium, New Orleans LA., October 25–28, 2010.

8. McFarlane, K., M.S. Torn, P. Hanson, R.C. Porras, J. Jastrow, and C. Swanston (2010), Edaphic and climatic controls on soil organic matter storage and dynamics in temperate broadleaf forests in the eastern USA. Fourth International Conference on Mechanisms of Organic Matter Stabilization and Destabilization in Soils, Presqu'ile de Giens, France, September 2010.
9. Murphy, L.N., W.J. Riley, and W.D. Collins (2010), Tree energy crops: Simulating loblolly/slash pine forests in CCSM4. Presented at the iESM Meeting, Greenbelt, MD, October 14, 2010.
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